

ABSTRACT OF THE DISCLOSURE

In the representation of X-ray images, an atomic number characteristic for an X-rayed sub-object (2, 3, 4) is determined from X-ray beams having different energies and the absorption values determined in that process, to which specific colors and shades are assigned. The representation of the color intensity is influenced so that, when representing objects (3, 4) having the same X-ray absorption on a monitor (8), the colors appear equally bright to the viewer. To that end, while the pre-set color for the objects (3, 4) is maintained, the brightness of the different colors is adjusted to an equal or approximately equal brightness, taking into account the spectral sensitivity of the human eye.